

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method of generating a depth map ~~(122)~~ comprising depth values representing distances to a viewer, for respective pixels of an image ~~(100)~~, the method comprising the steps of:

[[~~-~~]] determining a contour, using a determining unit, ~~(106)~~ on the basis of pixel values of the image ~~(100)~~, the contour ~~(106)~~ comprising a collection of adjacent points;

[[~~-~~]] computing curvature vectors, using a computing unit, ~~(108-114)~~ at a number of the points; and

[[~~-~~]] assigning, using an assigning unit, a first one of the depth values corresponding to the first one of the pixels on the basis of the curvature vectors ~~(108-114)~~.

2. (Currently Amended) A ~~The~~ method of generating a depth map ~~(122)~~ as claimed in Claim 1, ~~whereby~~ wherein the step of assigning the first one of the depth values comprises the sub-steps:

\_\_\_\_\_ computing depth derivatives on the basis of the respective curvature vectors; ~~(108-114)~~ and

\_\_\_\_\_ computing the first one of the depth values on the basis of a first one of the depth derivatives.

3. (Currently Amended) A ~~The~~ method of generating a depth map ~~(122)~~ as claimed in Claim 2, ~~whereby~~ wherein a size of a first one

of the depth derivatives is computed on the basis of the length of a first one of the curvature vectors.

4. (Currently Amended) A ~~The~~ method of generating a depth map ~~(122)~~ as claimed in Claim 2, ~~whereby~~ wherein a direction of a first one of the depth derivatives is computed on the basis of the orientation of a first one of the curvature vectors.

5. (Currently Amended) A ~~The~~ method of generating a depth map ~~(324)~~ as claimed in Claim 1, wherein the method further ~~comprising~~ comprises the steps of:

[[ - ]] computing a collection of average vectors ~~(320)~~ on the basis of the curvature vectors ~~(310)~~, the average vectors ~~(320)~~ having mutually equal lengths; and

[[ - ]] assigning a first one of the depth values corresponding to the first one of the pixels on the basis of the average vectors ~~(320)~~.

6. (Currently Amended) A ~~The~~ method of generating a depth map ~~(324)~~ as claimed in Claim 5, ~~whereby~~ wherein the collection of average vectors ~~(320)~~ is computed by means of parallel transport.

7. (Currently Amended) A ~~The~~ method of generating a depth map ~~(324)~~ as claimed in Claim 5, ~~whereby~~ wherein assigning the first one of the depth values comprises computing depth derivatives on the basis of the respective average vector ~~(320)~~ and computing the

first one of the depth values on the basis of a first one of the depth derivatives.

8. (Currently Amended) A ~~The~~ method of generating a depth map ~~(122)~~ as claimed in Claim 7, ~~whereby~~ wherein a size of a first one of the depth derivatives is computed on the basis of the length of a first one of the average vectors ~~(320)~~.

9. (Currently Amended) A ~~The~~ method of generating a depth map ~~(122)~~ as claimed in Claim 7, ~~whereby~~ wherein a direction of a first one of the depth derivatives is computed on the basis of the orientation of a first one of the average vectors ~~(320)~~.

10. (Currently Amended) A depth map generating unit ~~(401)~~ for generating a depth map ~~(122)~~ comprising depth values representing distances to a viewer, for respective pixels of an image ~~(100)~~, the depth map generating unit ~~(401)~~ comprising:

[[~~-~~]] determining means ~~(402)~~ for ~~the~~ determining a contour ~~(106)~~ on the basis of pixel values of the image ~~(100)~~, the contour ~~(106)~~ comprising a collection of adjacent points;

[[~~-~~]] computing means ~~(403)~~ for computing curvature vectors ~~(108-114)~~ at a number of the points; and

[[~~-~~]] assigning means ~~(404)~~ for assigning a first one of the depth values corresponding to the first one of the pixels on the basis of the curvature vectors ~~(108-114)~~.

11. (Currently Amended) An image processing apparatus (500) comprising:

[[ - ]] receiving means (502) for receiving a signal corresponding to an image (100); and

[[ - ]] a depth map generating unit (401) for generating a depth map (122), as claimed in Claim 10, coupled to the receiving means for generating a depth map.

12. (Currently Amended) A computer-readable storage medium having stored thereon a computer program product to be loaded by a computer arrangement, comprising instructions for causing a computer to generate a depth map (122) comprising depth values representing distances to a viewer, for respective pixels of an image (100), the computer arrangement comprising processing means and a memory, the computer program product, after being loaded, providing said processing means with the capability to carry out for performing, under control of the computer program, the steps of:

[[ - ]] determining a contour (106) on the basis of pixel values of the image (100), the contour (106) comprising a collection of adjacent points;

[[ - ]] computing curvature vectors (108-114) at a number of the points; and

[[ - ]] assigning a first one of the depth values corresponding to the first one of the pixels on the basis of the curvature vectors (108-114).